

**XP-002133679**

**AN - 1975-57901W [35]**

**A - [001] 012 02- 055 056 229 247 260 263 278 279 282 296 343 360 682 689  
693**

**CPY - KUNU-I**

**DC - A41 E14**

**FS - CPI**

**MC - A01-D03 E10-J02B**

**M3 - [01] H7 M210 M212 M231 M240 M281 M312 M320 M610 G100 M531 H721 N050  
N310 Q110 Q120 H715 M510 M520 M540 M720 M414 M902**

**PA - (KUNU-I) KUNUGI T**

**PN - JP50053333 A 19750512 DW197535 000pp**

**PR - JP19730103244 19730914**

**AB - J50053333 Styrene is prepd. by dehydrogenating PhEt with O2 in the presence of a catalyst contg. reduced Pd and metal halides or oxyhalides on a carrier (halogen is Cl Br or iodine). In an example, silica gel was impregnated with PdCl2 (1% based on Pd) reduced in a H2 stream at 450 degrees C for 3 hrs. and treated with 1 mole NaBr based on Pd. The catalyst was packed into a tubular reactor and treated with 1:1:8 molar ratio of PhEt-O-steam at 250 degrees C to give 14.2% styrene and 0.2% CO2, of 4.5% styrene and 5.6% CO2 for the control (no NaBr). The yield was raised to 36.1% at 305 degrees C. LiCl, NaCl, NaI, CaBr2, CoBr2, NaBrO3, or VOBBr3 were also effective instead of NaBr.**

**IW - STYRENE PREPARATION ETHYLBENZENE DEHYDROGENATE OXYGEN CATALYST CONTAIN  
REDUCE PALLADIUM METAL OXY**

**IKW - STYRENE PREPARATION ETHYLBENZENE DEHYDROGENATE OXYGEN CATALYST CONTAIN  
REDUCE PALLADIUM METAL OXY**

**NC - 001**

**OPD - 1973-09-14**

**ORD - 1975-05-12**

**PAW - (KUNU-I) KUNUGI T**

**TI - Styrene prepn from ethylbenzene - by dehydrogenation with oxygen using catalyst contg. reduced palladium and metal (oxy)halides**